AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A compound of formula I

$$R_2$$
 $(CR_3R_4)n$
 N
 N

(IVa)

wherein

Q is SO₂, CO, CONR₂₄, CSNR₂₅ or CH₂;

W is N or CR6;

X is N or CR,;

Y is NR₈ or CR₉R₁₀;

n is [[0 or]] an integer of 1 or 2;

- Z is NR_{11} or $CR_{12}R_{13}$ with the proviso that when n is 1, Q is SO_2 , CO or CH_2 and W is CR_6 then Z must be $CR_{12}R_{13}$ and with the further provisos that when Y is NR_8 then Z must be $CR_{12}R_{13}$ and at least one of Y and Z must be NR_8 or NR_{11} ;
- R_1 , R_2 and R_7 are each independently H, halogen, CN, OCO_2R_{14} , CO_2R_{15} , $CONR_{29}R_{30}$, $CNR_{16}NR_{17}R_{18}$, SO_mR_{19} , $NR_{20}R_{21}$, OR_{22} , COR_{23} or a C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, C_3 - C_6 cycloalkyl, cycloheteroalkyl, aryl or heteroaryl group each optionally substituted;
- R_3 , R_4 , R_9 , R_{10} , R_{12} and R_{13} are each independently H or an optionally substituted C_1-C_6 alkyl group;
- R_s is an optionally substituted C_1-C_6 alkyl, aryl or heteroaryl group;

m is 0 or an integer of 1 or 2;

 R_6 is H, halogen, or an optionally substituted C_1-C_6 alkyl, C_1-C_6 alkoxy, aryl or heteroaryl group;

- R_8 and R_{11} are each independently H, $CNR_{26}NR_{27}R_{28}$ or a C_1 - C_6 alkyl, C_3 - C_6 cycloalkyl, cycloheteralkyl, aryl or heteroaryl group each optionally substituted;
- R_{14} , R_{15} , R_{22} and R_{23} are each independently H or an optionally substituted C_1-C_6 alkyl, C_2-C_6 alkenyl, C_3-C_6 cycloalkyl, cycloheteroalkyl, aryl or heteroaryl group;
- $R_{16},~R_{17},~R_{18},~R_{20},~R_{21},~R_{26},~R_{27},~R_{28},~R_{29}~and~R_{30}~are~each independently~H~or~C_1-C_4alkyl;$
- R_{19} is an optionally substituted C_1-C_6 alkyl, aryl or heteroaryl group;
- R_{24} and R_{25} are each independently H or an optionally substituted C_1 - C_6 alkyl, aryl or heteroaryl group; and $\frac{}{}$ ---- represents a single bond or a double bond; or the stereoisomers thereof or the pharmaceutically acceptable salts thereof.
- 2. (Original) The compound according to claim 1 wherein Y is NR_{\circ} .
- 3. (Currently Amended) The compound according to claim 1 wherein n is [[0 or]] 2.
- 4. (Original) The compound according to claim 1 wherein \mbox{W} is \mbox{N} .
- 5. (Original) The compound according to claim 2 wherein n is 1.
- 6. (Original) The compound according to claim 4 wherein Z is NR_{11} .
- 7. (Original) The compound according to claim 5 wherein Q is SO_2 and R_5 is an optionally substituted aryl or heteroaryl group.
- 8. (Original) The compound according to claim 7 wherein X is CH and ____ represents a single bond.

(Currently Amended) The compound according to claim 1 9. selected from the group consisting of: 1-(phenylsulfonyl)-3-(piperidin-4-yl)-1H-indazole; 1-(4-nitrophenyl)-3-(piperidin-4-yl)-1H-indazole; 1-(4-fluorophenyl)-3-(piperidin-4-yl)-1H-indazole; 1-(3,4-dimethoxyphenyl-3-(piperidin-4-yl)-1H-indazole; 1-(4 fluorophenylsulfonyl) 3-(1 methyl-pyrrolidin 3 yl) 1Hindole; 1 (4 chlorophenylsulfonyl) 3 (1 methylpyrrolidin 3 yl) 1H indole: 1 (naphth 2-ylsulfonyl) 3 (1 methylpyrrolidin 3 yl) 1H indole; 1 (4 aminophenylsulfonyl) 3 (1 methylpyrrolidin 3 yl) 1H indole; 1 (3,4-dimethoxyphenylsulfonyl) 3 (1 methylpyrrolidin-3 yl) 1H indole; 1 (3,4 dichlorophenylsulfonyl) 3 (1 methylpyrrolidin 3 yl) 1H indole; 1 -[(4,5 dichlorothicn 2 yl)sulfonyl] 3 (1 methyl pyrrolidin 3 y1) 1H indole; 1 (2 bromophenylsulfonyl) 3 (1 methylpyrrolidin 3 yl) 1H indole: 1 (4-iodophenylsulfonyl) 3 (1 methylpyrrolidin 3 yl) 1H indole: 1 (2 iodophenylsulfonyl) 3 (1 methylpyrrolidin 3 yl) 1H indole; 1 (4 aminophenylsulfonyl) 3 (1 benzylpyrrolidin 3 yl)-1H indole: 3 (1 benzylpyrrolidin 3 yl) 1 (4 methylphenylsulfonyl) 1H indole; 3 (1 benzylpyrrolidin 3 yl) 1 (3,4 dichlorophenyl sulfonyl) 1H indole; 3 (1 benzylpyrrolidin 3 yl) 1 (2 bromophenylsulfonyl) 1Hindole; 5 [3 (1 benzylpyrrolidin 3 yl) indole 1 sulfonyl] 4 methyl thiazol 2 ylamine; 3 (1 benzylpyrrolidin 3 yl) 1 [(5 bromothien 2 yl) sulfonyl] 1H-indole; 1 phenylsulfonyl 3 (1 methylpyrrolidin 3 yl) 1H pyrrolo[2,3 b]pyridine;

- 1 phenylsulfonyl 3 (1 methylpyrrolidin 3 yl) 1H indazole;
- 1-phenylsulfonyl 3 (1 methyl 2,5 dihydro 1H pyrrol 3 yl) 1H-pyrrolo[2,3 b]pyridine;
- 1 phenylsulfonyl 3 (1 methyl 2,5 dihydro 1H pyrrol 3 yl) 1Hindole;
- 1-phenylsulfonyl-3-(1-methylpiperidin-4-yl)-1H-indazole;
- 1-phenylsulfonyl-3-(1-methyl-1,2,3,6-tetrahydropyridin-4-yl)-1H-indazole;
- 1-phenylsulfonyl-3-(1-methylazepan-4-yl)-1H-pyrrolo[2,3-b]pyridine;
- 1-phenylsulfonyl-3-(1-methylazepan-4-yl)-1H-indole;
- 1-phenylsulfonyl-5-fluoro-3-(1-methylazepan-4-yl)-1H-indole;
- 1-phenylsulfonyl-3-(1-methyl-2,3,6,7-tetrahydro-1H-azepin-4-yl)-1H-indole;
- 1-phenylsulfonyl-3-(1-methyl-2,5,6,7-tetrahydro-1H-azepin-4-yl)-1H-indole;
- 1-phenylsulfonyl-3-(1-methyl-2,3,6,7-tetrahydro-1H-azepin-4-yl)-1H-pyrrolo[2,3-b]pyridine;
- 1-phenylsulfonyl-5-fluoro-3-(1-methyl-2,3,6,7-tetrahydro-1H-azepin-4-yl)-1H-indole;
- 1-phenylsulfonyl-5-fluoro-3-(1-methyl-2,5,6,7-tetrahydro-1H-azepin-4-yl)-1H-indole;
- 1 (benzo[b]thioen 4 ylsulfonyl) 3 (1 methyl pyrrolidin 3 yl) 1H pyrrolo[2,3 b]pyridine;
- 1 (3 fluorophenylsulfonyl) 3 (1 methylpyrrolidin 3 yl) 1Hindazole;
- 1-(2,5-dichlorophenylsulfonyl) 3 (2,5-dihydro-1H pyrrol-3 yl) 1H pyrrolo[2,3-b]pyridine;
- 8 [3 (1 methyl 2,5 dihydro 1H pyrrol 3 yl)indole 1 sulfonyl]quinoline;
- 1-phenylsulfonyl-5-chloro-3-(1-methylpiperidin-4-yl)-1H-indazole;
- 5-methoxy-3-(1-methyl-1,2,3,6-tetrahydropyridin-4-yl)-1-(naphth-1-yl-sulfonyl)-1H-indazole;
- 3-(1-methylazepan-4-yl)-1-(naphth-1-yl-sulfonyl)-1H-pyrrolo[2,3-b]pyridine;
- 3-(1-methylazepan-4-yl)-1-(naphth-1-yl-sulfonyl)-1H-indole;
- 1-(benzo[b]thien-4-ylsulfonyl)-5-fluoro-3-(1-methylazepan-4yl)-1H-indole;

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8-[3-(1-methyl-2,3,6,7-tetrahydro-1H-azepin-4-yl)-indole-1-sulfonyl]-quinoline;
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- 3-(1-methyl-2,5,6,7-tetrahydro-1H-azepin-4-yl)-1-(naphth-1-ylsulfonyl)-1H-indole;
- 8-[3-(1-methyl-2,3,6,7-tetrahydro-1H-azepin-4-yl)-pyrrolo[2,3-b]pyridine-1-sulfonyl]-quinoline;
- 8-[5-fluoro-3-(1-methyl-2,3,6,7-tetrahydro-1H-azepin-4-yl)indole-1-sulfonyl]-quinoline;
- 5-fluoro-3-(1-methyl-2,5,6,7-tetrahydro-1H-azepin-4-yl)-1-(naphth-1-ylsulfonyl)-1H-indole;
- 1 (benzo[b]thien 4 ylsulfonyl) 3 (1 benzyl pyrrolidin 3 yl) 1 pyrrolo[2,3 b]pyridine;
- 1 (3 fluoro phenylsulfonyl) 3 (1 phenethyl pyrrolidin 3 yl)

 1H indazole;
- 1 (2,5-dichlorophenylsulfonyl) 3 (1 ethyl 2,5-dihydro 1H-pyrrol 3 yl) 1H pyrrolo[2,3-b]pyridine;
- 3 (1 methyl 2,5 dihydro 1H pyrrol 3 yl) 1 (naphth 2 ylsulfonyl) 1H indole;
- 5-chloro-1-(3-fluorophenylsulfonyl)-3-piperidin-4-yl-1H-indazole;
- 5-methoxy-1-(naphth-1-ylsulfonyl)-3-(1,2,2-trimethyl-1,2,3,6-tetrahydro-pyridin-4-yl)-1H-indazole;
- 1-(naphth-1-ylsulfonyl)-3-(1-phenethyl-azepan-4-yl)-1Hpyrrolo[2,3-b]pyridine;
- 3-azepan-4-yl-1-(naphth-1-ylsulfonyl)-1H-indole;
- 3-azepan-4-yl-1-(3-chloro-5-methyl-benzo[b]thien-2ylsulfonyl)-5-fluoro-1H-indole;
- 8-[3-(1-phenethyl-2,3,6,7-tetrahydro-1H-azepin-4-yl)-indole-1-sulfonyl]-quinoline;
- 3-[1-(3,3-dimethylbutyl)-2,5,6,7-tetrahydro-1H-azepin-4-yl]-1-(naphth-2-ylsulfonyl)-1H-indole;
- 1-(2,3-dichlorophenylsulfonyl)-3-(1-methyl-2,3,6,7-tetrahydro-1H-azepin-4-yl)-1H-pyrrolo[2,3-]pyridine;
- 1-[(3-chloro-5-methoxyphenylsulfonyl)]-3-(2,2-dimethyl2,3,6,7-tetrahydro-1H-azepin-4-yl)-5-fluoro-1H-indole;
- 3-azepan-4-yl-5-fluoro-1-(naphth-2-ylsulfonyl)-1H-indole;
- 1-Benzenesulfonyl-3-piperidin-3-yl-1H-indole;
- 1-(4-isopropyl-benzenesulfonyl)-3-piperidin-3-yl-1H-indole;
- 1-(5-chloro-thiophene-2-sulfonyl)-3-piperidin-3-yl-1H-indole;
- 1-(3-chloro-benzenesulfonyl)-3-piperidin-3-yl-1H-indole;

- 1-(3,4-difluoro-benzenesulfonyl)-3-piperidin-3-yl-1H-indole;
- 1-(4-trifluoromethoxy-benzenesulfonyl)-3-piperidin-3-yl-1Hindole;
- 1-(4-methoxy-benzenesulfonyl)-3-piperidin-3-yl-1H-indole;
- 1-(4-trifluoromethy-benzenesulfonyl)-3-piperidin-3-yl-1H-indole;
- 1-(3-chloro-4-methyl-benzenesulfonyl)-3-piperidin-3-yl-1Hindole;
- 1-(2-chloro-4-trifluoromethyl-benzenesulfonyl)-3-piperidin-3yl-1H-indole;
- 1-(2-naphthylenesulfonyl)-3-piperidin-3-yl-1H-indole;
- 1-(5-chloro-3-methyl-benzo[b]thiophene-2-sulfonyl)-3-piperidin-3-yl-1H-indole;
- 1-(2,6-dichloro-imidazo[2,1-b]thiazole-5-sulfonyl)-3-piperidin-3-yl-1H-indole;
- 2-chloro-3-(3-piperidin-3-yl-indole-1-sulfonyl)-imidazo[1,2-a]pyridine;
- 2-chloro-3-(3-piperidin-3-yl-indole-1-sulfonyl)benzo[d]imidazo[2,1-b]thiazole;
- 1-(4-isopropyl-benzenesulfonyl)-3-piperidin-3-yl-1Hpyrrolo[2,3-b]pyridine;
- 1-(5-chloro-thiophene-2-sulfonyl)-3-piperidin-3-yl-1Hpyrrolo[2,3-b]pyridine;
- 1-(3-chloro-benzenesulfonyl)-3-piperidin-3-yl-1H-pyrrolo[2,3-b]pyridine;
- 1-(3,4-difluoro -benzenesulfonyl)-3-piperidin-3-yl-1H-pyrrolo[2,3-b]pyridine;
- 1-(4-trifluoromethoxy-benzenesulfonyl)-3-piperidin-3-yl-1H-pyrrolo[2,3-b]pyridine;
- 1-(3-chloro-4-methyl-benzenesulfonyl)-3-piperidin-3-yl-1Hpyrrolo[2,3-b]pyridine;
- 1-(2-chloro-4-trifluoromethyl-benzenesulfonyl)-3-piperidin-3-yl-1H-pyrrolo[2,3-b]pyridine;
- 1-(2-naphthylenesulfonyl)-3- piperidin-3-yl-1H-pyrrolo[2,3b]pyridine;
- 1-(5-chloro-3-methyl-benzo[b]thiophene-2-sulfonyl)-3-piperidin-3-yl-1H-pyrrolo[2,3-b]pyridine;
- 2-chloro-3-(3-piperidin-3-yl-pyrrolo[2,3-b]pyridine-1-sulfonyl)-imidazo[1,2-a]pyridine;

2-chloro-3-(3-piperidin-3-yl-pyrrolo[2,3-b]pyridine-1-sulfonyl)-benzo[d]imidazo[2,1-b]thiazole; and the pharmaceutically acceptable salts thereof.

10. (Currently Amended) A method for the treatment of a disorder of the central nervous system related to or affected by the 5-HT6 receptor in a patient in need thereof which comprises providing said patient with a therapeutically effective amount of a compound of formula I

$$R_2$$
 (CR_3R_4)
 R_1
 $Q-R_5$
 (I)

wherein

Q is SO₂, CO, CONR₂₄, CSNR₂₅ or CH₂;

W is N or CR6;

X is N or CR,;

Y is NR, or CR,R10;

n is [[0 or]] an integer of 1 or 2;

- Z is NR_{11} or $CR_{12}R_{13}$ with the proviso that when n is 1, Q is SO_2 , CO or CH_2 and W is CR_6 then Z must be $CR_{12}R_{13}$ and with the further provisos that when Y is NR_8 then Z must be $CR_{12}R_{13}$ and at least one of Y and Z must be NR_8 or NR_{11} ;
- R_1 , R_2 and R_7 are each independently H, halogen, CN, OCO_2R_{14} , CO_2R_{15} , $CONR_{29}R_{30}$, $CNR_{16}NR_{17}R_{18}$, SO_mR_{19} , $NR_{20}R_{21}$, OR_{22} , COR_{23} or a C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, C_3 - C_6 cycloalkyl, cycloheteroalkyl, aryl or heteroaryl group each optionally substituted;
- R_3 , R_4 , R_9 , R_{10} , R_{12} and R_{13} are each independently H or an optionally substituted C_1-C_6 alkyl group;
- R_s is an optionally substituted $C_1 C_6 alkyl$, aryl or heteroaryl group;

- m is 0 or an integer of 1 or 2;
- R_6 is H, halogen, or an optionally substituted C_1-C_6 alkyl, C_1-C_6 alkoxy, aryl or heteroaryl group;
- R_8 and R_{11} are each independently H, $CNR_{26}NR_{27}R_{28}$ or a C_1 C_6 alkyl, C_3 - C_6 cycloalkyl, cycloheteralkyl, aryl or heteroaryl group each optionally substituted;
- R_{14} , R_{15} , R_{22} and R_{23} are each independently H or an optionally substituted C_1-C_6 alkyl, C_2-C_6 alkenyl, C_3-C_6 cycloalkyl, cycloheteroalkyl, aryl or heteroaryl group;
- R_{16} , R_{17} , R_{18} , R_{20} , R_{21} , R_{26} , R_{27} , R_{28} , R_{29} and R_{30} are each independently H or C_1-C_4 alkyl;
- R_{19} is an optionally substituted C_1-C_6 alkyl, aryl or heteroaryl group;
- R_{24} and R_{25} are each independently H or an optionally substituted C_1 - C_6 alkyl, aryl or heteroaryl group; and $\frac{---}{-}$ represents a single bond or a double bond; or the stereoisomers thereof or the pharmaceutically acceptable salts thereof.
- 11. (Original) The method according to claim 10 wherein said disorder is a mood disorder, a motor disorder, or a cognitive disorder.
- 12. (Original) The method according to claim 10 wherein said disorder is schizophrenia.
- 13. (Original) The method according to claim 11 wherein said disorder is anxiety or depression.
- 14. (Original) The method according to claim 11 wherein said disorder is memory loss or attention deficit disorder.
- 15. (Currently Amended) A pharmaceutical composition which comprises a pharmaceutically acceptable carrier and an effective amount of a compound of formula I

$$R_2$$
 $(CR_3R_4)n$
 (CR_3R_5)
 $(CR_3R_4)n$
 $(CR_3R_4)n$

wherein

Q is SO,, CO, CONR,, CSNR, or CH,;

W is N or CR,;

X is N or CR,;

Y is NR, or CR,R10;

n is [[0 or]] an integer of 1 or 2;

Z is NR_{11} or $CR_{12}R_{13}$ with the proviso that when n is 1, Q is SO_2 , CO or CH_2 , and W is CR_6 then Z must be $CR_{12}R_{13}$ and with the further provisos that when Y is NR_8 then Z must be $CR_{12}R_{13}$ and at least one of Y and Z must be NR_8 or NR_{11} ;

 R_1 , R_2 and R_2 , are each independently H, halogen, CN, OCO_2R_{14} , CO_2R_{15} , $CONR_{29}R_{30}$, $CNR_{16}NR_{17}R_{18}$, SO_mR_{19} , $NR_{20}R_{21}$, OR_{22} , COR_{23} or a C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, C_3 - C_6 cycloalkyl, cycloheteroalkyl, aryl or heteroaryl group each optionally substituted;

 R_3 , R_4 , R_9 , R_{10} , R_{12} and R_{13} are each independently H or an optionally substituted C_1-C_6 alkyl group;

R₅ is an optionally substituted C₁-C₆alkyl, aryl or heteroaryl group;

m is 0 or an integer of 1 or 2;

 R_{ϵ} is H, halogen, or an optionally substituted C_1-C_{ϵ} alkyl, C_1-C_{ϵ} alkoxy, aryl or heteroaryl group;

 R_8 and R_{11} are each independently H, $CNR_{26}NR_{27}R_{28}$ or a C_1 - C_6 alkyl, C_3 - C_6 cycloalkyl, cycloheteralkyl, aryl or heteroaryl group each optionally substituted;

 R_{14} , R_{15} , R_{22} and R_{23} are each independently H or an optionally substituted C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_3 - C_6 cycloalkyl, cycloheteroalkyl, aryl or heteroaryl group;

 $R_{16},\ R_{17},\ R_{18},\ R_{20},\ R_{21},\ R_{26},\ R_{27},\ R_{28},\ R_{29}\ and\ R_{30}\ are\ each$ independently H or C_1-C_4 alkyl;

- R_{19} is an optionally substituted C_1-C_6 alkyl, aryl or heteroaryl group;
- R_{24} and R_{25} are each independently H or an optionally substituted C_1 - C_6 alkyl, aryl or heteroaryl group; and $\underline{---}$ represents a single bond or a double bond; or the stereoisomers thereof or the pharmaceutically acceptable salts thereof.
- 16. (Original) The composition according to claim 15 having a formula I compound wherein n is 1; Q is SO_2 ; Y is NR_8 ; and X is CR_2 .
- 17. (Currently Amended) The composition according to claim 15 having a formula I compound wherein [[n is 0;]] Q is $SO_2;$ X is $CR_7;$ and Z is NR_{11} .
- 18. (Original) The composition according to claim 16 having a formula I compound wherein R_s is an optionally substituted aryl group and --- represents a single bond.
- 19. (Currently Amended) The composition according to claim 15 having a formula I compound selected from the group consisting of:
- 1-(phenylsulfonyl)-3-(piperidin-4-yl)-1H-indazole;
- 1-(4-nitrophenyl)-3-(piperidin-4-yl)-1H-indazole;
- 1-(4-fluorophenyl)-3-(piperidin-4-yl)-1H-indazole;
- 1-(3,4-dimethoxyphenyl-3-(piperidin-4-yl)-1H-indazole;
- 1 (4 fluorophenylsulfonyl) 3 (1 methyl-pyrrolidin 3 yl)-1H-indole:
- 1 (4 chlorophenylsulfonyl) 3 (1 methylpyrrolidin 3 yl) 1H indole:
- 1 (naphth 2 ylsulfonyl) 3 (1 methylpyrrolidin 3 yl) 1H indole;
- 1 (4-aminophenylsulfonyl) 3 (1 methylpyrrolidin 3 yl) 1H-indole;
- 1 (3,4 dimethoxyphenylsulfonyl) 3 (1 methylpyrrolidin 3 yl) 1H indole;
- 1 (3,4 dichlorophenylsulfonyl) 3 (1 methylpyrrolidin 3 yl) 1H indole;

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1 [(4,5 dichlorothien 2 yl)sulfonyl] 3 (1 methyl pyrrolidin 3-
yl) 1H indole;
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- 1 (2-bromophenylsulfonyl) 3 (1 methylpyrrolidin 3 yl) 1H-indole:
- 1 (4-iodophenylsulfonyl) 3 (1 methylpyrrolidin 3 yl) 1H-indole;
- 1 (2 iodophenylsulfonyl) 3 (1 methylpyrrolidin 3 yl) 1H indole:
- 1 (4 aminophenylsulfonyl) -3 (1 benzylpyrrolidin 3 yl) 1Hindole;
- 3 (1 benzylpyrrolidin 3 yl) 1 (4 methylphenylsulfonyl) 1H indole;
- 3 (1 benzylpyrrolidin 3 yl) 1 (3,4 dichlorophenyl sulfonyl) 1H indole;
- 3 (1-benzylpyrrolidin 3 yl) 1 (2-bromophenylsulfonyl) 1H-indole:
- 5 [3 (1 benzylpyrrolidin 3 yl) indole 1 sulfonyl] 4 methyl thiazol 2 ylamine;
- 3 (1 benzylpyrrolidin 3 yl) 1 [(5 bromothien 2 yl)sulfonyl] 1H indole;
- 1 phenylsulfonyl 3 (1 methylpyrrolidin 3 yl) 1H pyrrolo[2,3 b]pyridine;
- 1 phenylsulfonyl 3 (1 methylpyrrolidin 3 yl) 1H indazole;
- 1 phenylsulfonyl 3 (1 methyl 2,5 dihydro 1H pyrrol 3 yl) 1H pyrrolo[2,3 b]pyridine;
- 1 phenylsulfonyl 3 (1 methyl 2,5 dihydro 1H pyrrol 3 yl) 1H indole;
- 1-phenylsulfonyl-3-(1-methylpiperidin-4-yl)-1H-indazole;
- 1-phenylsulfonyl-3-(1-methyl-1,2,3,6-tetrahydropyridin-4-yl)-1H-indazole;
- 1-phenylsulfonyl-3-(1-methylazepan-4-yl)-1H-pyrrolo[2,3-b]pyridine;
- 1-phenylsulfonyl-3-(1-methylazepan-4-yl)-1H-indole;
- 1-phenylsulfonyl-5-fluoro-3-(1-methylazepan-4-yl)-1H-indole;
- 1-phenylsulfonyl-3-(1-methyl-2,3,6,7-tetrahydro-1H-azepin-4-yl)-1H-indole;
- 1-phenylsulfonyl-3-(1-methyl-2,5,6,7-tetrahydro-1H-azepin-4-yl)-1H-indole;
- 1-phenylsulfonyl-3-(1-methyl-2,3,6,7-tetrahydro-1H-azepin-4-yl)-1H-pyrrolo[2,3-b]pyridine;

- 1-phenylsulfonyl-5-fluoro-3-(1-methyl-2,3,6,7-tetrahydro-1H-azepin-4-yl)-1H-indole;
- 1-phenylsulfonyl-5-fluoro-3-(1-methyl-2,5,6,7-tetrahydro-1H-azepin-4-yl)-1H-indole;
- 1 (benzo[b]thioen 4 ylsulfonyl) 3 (1 methyl pyrrolidin 3 yl) 1H pyrrolo[2,3 b]pyridine;
- 1 (3 fluorophenylsulfonyl) 3 (1 methylpyrrolidin 3 yl) 1Hindazole;
- 1 (2,5-dichlorophenylsulfonyl) 3 (2,5-dihydro 1H pyrrol 3 yl) 1H pyrrolo[2,3 b]pyridine;
- 8 [3 (1 methyl 2,5 dihydro 1H pyrrol 3 yl)indole 1 sulfonyl] quinoline;
- 1-phenylsulfonyl-5-chloro-3-(1-methylpiperidin-4-yl)-1H-indazole;
- 5-methoxy-3-(1-methyl-1,2,3,6-tetrahydropyridin-4-yl)-1-(naphth-1-yl-sulfonyl)-1H-indazole;
- 3-(1-methylazepan-4-yl)-1-(naphth-1-yl-sulfonyl)-1H-pyrrolo[2,3-b]pyridine;
- 3-(1-methylazepan-4-yl)-1-(naphth-1-yl-sulfonyl)-1H-indole;
- 1-(benzo[b]thien-4-ylsulfonyl)-5-fluoro-3-(1-methylazepan-4yl)-1H-indole;
- 8-[3-(1-methyl-2,3,6,7-tetrahydro-1H-azepin-4-yl)-indole-1-sulfonyl]-quinoline;
- 3-(1-methyl-2,5,6,7-tetrahydro-1H-azepin-4-yl)-1-(naphth-1-ylsulfonyl)-1H-indole;
- 8-[3-(1-methyl-2,3,6,7-tetrahydro-1H-azepin-4-yl)-pyrrolo[2,3-b]pyridine-1-sulfonyl]-quinoline;
- 8-[5-fluoro-3-(1-methyl-2,3,6,7-tetrahydro-1H-azepin-4-yl)indole-1-sulfonyl]-quinoline;
- 5-fluoro-3-(1-methyl-2,5,6,7-tetrahydro-1H-azepin-4-yl)-1-(naphth-1-ylsulfonyl)-1H-indole;
- 1 (benzo[b]thien 4 ylsulfonyl) 3 (1 benzyl pyrrolidin 3 yl)

 1H pyrrolo[2,3-b]pyridine;
- 1 (3 fluoro phenylsulfonyl) 3 (1 phenethyl pyrrolidin 3 yl) 1H indazole;
- 1 (2,5 dichlorophenylsulfonyl) 3 (1 ethyl 2,5 dihydro 1H-pyrrolo[2,3 b]pyridine;
- 3 (1 methyl 2,5 dihydro 1H pyrrol 3 yl) 1 (naphth 2 ylsulfonyl) 1H indole;

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5-chloro-1-(3-fluorophenylsulfonyl)-3-piperidin-4-yl-1H-
     indazole:
5-methoxy-1-(naphth-1-ylsulfonyl)-3-(1,2,2-trimethyl-1,2,3,6-
     tetrahydro-pyridin-4-yl)-1H-indazole;
1-(naphth-1-ylsulfonyl)-3-(1-phenethyl-azepan-4-yl)-1H-
     pyrrolo[2,3-b]pyridine;
3-azepan-4-yl-1-(naphth-1-ylsulfonyl)-1H-indole;
3-azepan-4-yl-1-(3-chloro-5-methyl-benzo[b]thien-2-
     ylsulfonyl)-5-fluoro-1H-indole;
8-[3-(1-phenethyl-2,3,6,7-tetrahydro-1H-azepin-4-yl)-indole-1-
     sulfonyl]-quinoline;
3 - [1 - (3, 3 - dimethylbutyl) - 2, 5, 6, 7 - tetrahydro - 1H - azepin - 4 - yl] - 1 -
     (naphth-2-ylsulfonyl)-1H-indole;
1-(2,3-dichlorophenylsulfonyl)-3-(1-methyl-2,3,6,7-tetrahydro-
     1H-azepin-4-yl)-1H-pyrrolo[2,3-]pyridine;
1-[(3-chloro-5-methoxyphenylsulfonyl)]-3-(2,2-dimethyl-
     2,3,6,7-tetrahydro-1H-azepin-4-yl)-5-fluoro-1H-indole;
3-azepan-4-yl-5-fluoro-1-(naphth-2-ylsulfonyl)-1H-indole;
1-Benzenesulfonyl-3-piperidin-3-yl-1H-indole;
1-(4-isopropyl-benzenesulfonyl)-3-piperidin-3-yl-1H-indole;
1-(5-chloro-thiophene-2-sulfonyl)-3-piperidin-3-yl-1H-indole;
1-(3-chloro-benzenesulfony1)-3-piperidin-3-yl-1H-indole;
1-(3,4-difluoro-benzenesulfonyl)-3-piperidin-3-yl-1H-indole;
1-(4-trifluoromethoxy-benzenesulfonyl)-3-piperidin-3-yl-1H-
     indole;
1-(4-methoxy-benzenesulfonyl)-3-piperidin-3-yl-1H-indole;
1-(4-trifluoromethy-benzenesulfonyl)-3-piperidin-3-yl-1H-
     indole;
1-(3-chloro-4-methyl-benzenesulfonyl)-3-piperidin-3-yl-1H-
     indole;
1-(2-chloro-4-trifluoromethyl-benzenesulfonyl)-3-piperidin-3-
     yl-1H-indole;
1-(2-naphthylenesulfonyl)-3-piperidin-3-yl-1H-indole;
1-(5-chloro-3-methyl-benzo[b]thiophene-2-sulfonyl)-3-
     piperidin-3-yl-1H-indole;
1-(2,6-dichloro-imidazo[2,1-b]thiazole-5-sulfonyl)-3-
     piperidin-3-yl-1H-indole;
2-chloro-3-(3-piperidin-3-yl-indole-1-sulfonyl)-imidazo[1,2-
     a]pyridine;
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Patent

- 2-chloro-3-(3-piperidin-3-yl-indole-1-sulfonyl)benzo[d]imidazo[2,1-b]thiazole;
- 1-(4-isopropyl-benzenesulfonyl)-3-piperidin-3-yl-1Hpyrrolo[2,3-b]pyridine;
- 1-(5-chloro-thiophene-2-sulfonyl)-3-piperidin-3-yl-1Hpyrrolo[2,3-b]pyridine;
- 1-(3-chloro-benzenesulfonyl)-3-piperidin-3-yl-1H-pyrrolo[2,3-b]pyridine;
- 1-(3,4-difluoro -benzenesulfonyl)-3-piperidin-3-yl-1Hpyrrolo[2,3-b]pyridine;
- 1-(4-trifluoromethoxy-benzenesulfonyl)-3-piperidin-3-yl-1Hpyrrolo[2,3-b]pyridine;
- 1-(3-chloro-4-methyl-benzenesulfonyl)-3-piperidin-3-yl-1Hpyrrolo[2,3-b]pyridine;
- 1-(2-chloro-4-trifluoromethyl-benzenesulfonyl)-3-piperidin-3yl-1H-pyrrolo[2,3-b]pyridine;
- 1-(2-naphthylenesulfonyl)-3- piperidin-3-yl-1H-pyrrolo[2,3b]pyridine;
- 1-(5-chloro-3-methyl-benzo[b]thiophene-2-sulfonyl)-3-piperidin-3-yl-1H-pyrrolo[2,3-b]pyridine;
- 2-chloro-3-(3-piperidin-3-yl-pyrrolo[2,3-b]pyridine-1-sulfonyl)-imidazo[1,2-a]pyridine;
- 2-chloro-3-(3-piperidin-3-yl-pyrrolo[2,3-b]pyridine-1-sulfonyl)-benzo[d]imidazo[2,1-b]thiazole; and the pharmaceutically acceptable salts thereof.
- 20. (Currently Amended) A process for the preparation of a compound of formula If

$$R_2$$
 $(CR_3R_4)n$
 R_1
 SO_2R_5
(If)

wherein

- W is N or CR6;
- X is N or CR,;
- Y is NR, or CR,R10;
- n is [[0 or]] an integer of 1 or 2;
- Z is NR_{11} or $CR_{12}R_{13}$ with the proviso that when n is 1 and W is CR_6 then Z must be $CR_{12}R_{13}$ and with the further provisos that when Y is NR_8 then Z must be $CR_{12}R_{13}$ and at least one of Y and Z must be NR_8 or NR_{11} ;
- R_1 , R_2 and R_7 are each independently H, halogen, CN, OCO_2R_{14} , CO_2R_{15} , $CONR_{29}R_{30}$, $CONR_{29}R_{30}$, $CNR_{16}NR_{17}R_{18}$, SO_mR_{19} , $NR_{20}R_{21}$, OR_{22} , COR_{23} or a C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, C_3 - C_6 cycloalkyl, cycloheteroalkyl, aryl or heteroaryl group each optionally substituted;
- R_3 , R_4 , R_9 , R_{10} , R_{12} and R_{13} are each independently H or an optionally substituted C_1-C_6 alkyl group;
- R_s is an optionally substituted C_1 - C_6 alkyl, aryl or heteroaryl group;
- m is 0 or an integer of 1 or 2;
- $R_{\rm 6}$ is H, halogen, or an optionally substituted $\rm C_1-C_6 alkyl$, $\rm C_1-C_6 alkoxy,$ aryl or heteroaryl group;
- R_8 and R_{11} are each independently H, $CNR_{26}NR_{27}R_{28}$ or a C_1 C_6 alkyl, C_3 - C_6 cycloalkyl, cycloheteralkyl, aryl or heteroaryl group each optionally substituted;
- R_{14} , R_{15} , R_{22} and R_{23} are each independently H or an optionally substituted C_1-C_6 alkyl, C_2-C_6 alkenyl, C_3-C_6 cycloalkyl, cycloheteroalkyl, aryl or heteroaryl group;
- R_{16} , R_{17} , R_{18} , R_{20} , R_{21} , R_{26} , R_{27} , R_{28} , R_{29} and R_{30} are each independently H or C_1 - C_4 alkyl;
- R_{19} is an optionally substituted C_1-C_6 alkyl, aryl or heteroaryl group; and
- --- represents a single bond or a double bond which process comprises reacting a compound of formula IVa

$$R_2$$
 $(CR_3R_4)n$
 N
 N

(IVa)

wherein W, X, Y, Z, n, R_1 , R_2 , R_3 and R_4 are as defined above with a sulfonyl chloride, $R_5 SO_2 Cl$, wherein R_5 is defined above in the presence of a base.